

rate or access charge.²⁴⁸⁷ We recognize that, using current technology, it may be difficult for CMRS providers to determine, in real time, which cell site a mobile customer is connected to, let alone the customer's specific geographic location.²⁴⁸⁸ This could complicate the computation of traffic flows and the applicability of transport and termination rates, given that in certain cases, the geographic locations of the calling party and the called party determine whether a particular call should be compensated under transport and termination rates established by one state or another, or under interstate or intrastate access charges. We conclude, however, that it is not necessary for incumbent LECs and CMRS providers to be able to ascertain geographic locations when determining the rating for any particular call at the moment the call is connected. We conclude that parties may calculate overall compensation amounts by extrapolating from traffic studies and samples. For administrative convenience, the location of the initial cell site when a call begins shall be used as the determinant of the geographic location of the mobile customer. As an alternative, LECs and CMRS providers can use the point of interconnection between the two carriers at the beginning of the call to determine the location of the mobile caller or called party.

1045. As discussed above, pursuant to section 251(b)(5) of the Act, all local exchange carriers, including small incumbent LECs and small entities offering competitive local exchange services, have a duty to establish reciprocal compensation arrangements for the transport and termination of local exchange service. CMRS providers, including small entities, and LECs, including small incumbent LECs and small entity competitive LECs, will receive reciprocal compensation for terminating certain traffic that originates on the networks of other carriers, and will pay such compensation for certain traffic that they transmit and terminate to other carriers. We believe that these arrangements should benefit all carriers, including small incumbent LECs and small entities, because it will facilitate competitive entry into new markets while ensuring reasonable compensation for the additional costs incurred in terminating traffic that originates on other carriers' networks. We also recognize that, to implement transport and termination pursuant to section 251(b)(5), carriers, including small incumbent LECs and small entities, may be required to measure the exchange of traffic, but we believe that the cost of such measurement to these carriers is likely to be substantially outweighed by the benefits of these arrangements.²⁴⁸⁹

²⁴⁸⁷ In the *LEC-CMRS Interconnection NPRM*, we observed that a significant amount of LEC-CMRS traffic crosses state lines, because CMRS service areas often cross state lines and CMRS customers are mobile. *LEC CMRS Interconnection NPRM* at para. 112.

²⁴⁸⁸ *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, RM-8143, Report and Order and Further Notice of Proposed Rulemaking, FCC 96-264 at paras. 8-9 (adopted June 12, 1996, released July 26, 1996).

²⁴⁸⁹ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

3. Pricing Methodology

a. Background

1046. In the NPRM, we sought comment on how to interpret section 252(d)(2) of the Act. Specifically, we asked if we should establish a generic pricing methodology or impose a ceiling to guide the states in setting the charge for the transport and termination of traffic. We also asked whether such a generic pricing methodology or ceiling should be established using the same principles we adopt for interconnection and unbundled elements.²⁴⁹⁰ Additionally, we sought comment on the use of an interim and transitional pricing mechanism that would address concerns about unequal bargaining power in negotiations.²⁴⁹¹

b. Comments

1047. Time Warner argues that call termination is an essential element in completing calls and that this last "bottleneck" should be governed by a lower cost standard than elements that are based on a competitor's "make or buy decisions."²⁴⁹² MCI contends that the level of compensation for transport and termination should be determined by calculating the TSLRIC incurred by the incumbent in providing the network elements necessary to terminate the local calls originating on the networks of its competitors, and converting that cost to a per-minute rate.²⁴⁹³ Cox asserts that section 252(d)(2) requires that competing carriers have mutual obligations to terminate traffic that originates on competitors' networks, and that this obligation requires that the rate for transport and termination be less than the rate charged for unbundled elements.²⁴⁹⁴ Cox advocates the use of LRIC, as opposed to TSLRIC, methodology to set transport and termination rates because LRIC recognizes only the cost of capital expenditures to provide the additional terminations and transport required by a competitive local service provider, including maintenance and depreciation of those facilities, without any allocation of overhead.²⁴⁹⁵

²⁴⁹⁰ NPRM at para. 234.

²⁴⁹¹ NPRM at para. 244.

²⁴⁹² Time Warner comments at 50. "Make or buy decision" is Time Warner's term for deciding between providing services through its own facilities or through resale and/or purchasing unbundled elements.

²⁴⁹³ MCI comments at 48-49; *see also* NCTA comments at 47-50; Comcast comments at 22; Competition Policy Institute reply at 15.

²⁴⁹⁴ Cox comments at 34; *see also* Sprint Spectrum/APC comments at 8-9.

²⁴⁹⁵ Cox comments at 25-26; *see also* GST comments at 38-40; MFS comments at 80-81. We note above that TSLRIC is one instance of LRIC where the increment chosen is the provision of the entire service.

1048. BellSouth argues that the recovery of transport and termination costs should include joint and common costs and that no LEC can charge rates for transport and termination in excess of access charges because potential customers would simply choose arrangements under the latter.²⁴⁹⁶ The Western Alliance asserts that rates for the transport and termination of traffic must allow rural LECs to recover the incremental cost of local access, a reasonable apportionment of joint and common costs, and any lost contribution to basic, local service rates represented by the interconnecting carriers' service.²⁴⁹⁷ The Western Alliance argues that recovery of lost contribution is especially important for smaller LECs because they are unlikely to have alternative sources from which to support basic service rates.²⁴⁹⁸ USTA argues rates should be based on existing prices (*i.e.* access charges) because this would not require small and mid-sized incumbent LECs to conduct cost studies that could bog down the interconnection negotiation process.²⁴⁹⁹ GTE claims that the "additional costs incurred" language undermines the contention that cost studies must assume the most efficient technology available because costs are incurred using actual network technology, not a theoretical network.²⁵⁰⁰

1049. The Illinois Commission asserts that the two different pricing standards in sections 252(d)(1)(A)(i) and 252(d)(2)(A)(ii) are not mutually exclusive and the text of the two provisions does not prohibit the states from using identical pricing standards for the two categories of service. The Illinois Commission notes that there is some substitutability between unbundled network elements and incumbent LEC transport and termination of a competitor's traffic. Consequently, the Illinois Commission contends that two widely disparate policies for the pricing of these services may have potentially distorting effects.²⁵⁰¹ The Illinois Commission further argues that section 252(d)(2)(B)(ii) does not prohibit rate regulation proceedings to establish transport and termination costs and does not bar a state from requiring carriers to maintain records regarding transport and termination costs, if authority exists independently of the 1996 Act.²⁵⁰² GST argues that section 252(d)(2)(B)(ii)'s

²⁴⁹⁶ BellSouth comments at 70-72; *see also* MECA comments at 5; and Mass. Commission comments at 8-9.

²⁴⁹⁷ Western Alliance comments at 5.

²⁴⁹⁸ *Id.* at 7 n. 14.

²⁴⁹⁹ USTA comments at 54-55.

²⁵⁰⁰ GTE reply at 30; *see also* PacTel reply at 45-46.

²⁵⁰¹ Illinois Commission comments at 76-77; *see also* California Commission comments at 42; ACSI comments at 10-11; Ohio Commission comments at 70-71; Texas Public Utility Counsel comments at 1, 50; Lincoln Tel. comments at 20; Citizens Utilities comments at 32-33.

²⁵⁰² Illinois Commission comments at 78; *see also* California Commission comments at 43-44.

prohibition against use of cost studies to set transport and termination rates suggests Congress intended for compensation prices to be set on the basis of economically relevant costs, not on the basis of artificial regulatory mechanisms, such as separations, revenue requirements, or a carrier's embedded investment.²⁵⁰³

1050. The Ohio Commission asserts that states should establish a price ceiling for transport and termination of local traffic on the basis of an imputation test. The Ohio Commission argues that the ceiling price for transport and termination of local traffic should be such that it allows the incumbent LEC to pass an imputation test for local traffic in the aggregate (*i.e.*, flat-rated, message, and measured local residence and business traffic) at the end user rate levels.²⁵⁰⁴ Similarly, MFS suggests that the Commission adopt a rate equal to one half of the retail rate because, as a general rule, call origination and billing can be presumed to be equal to the cost of transport and termination.²⁵⁰⁵ Jones Intercable contends that the Commission should establish a presumption that all LECs can offer traffic termination at a rate that is no higher than the lowest rate that has been agreed to (or imposed through arbitration) for such traffic termination by *any* LEC. Jones Intercable adds that such a rule is immensely practical because it relieves competitors of the need to fight the same battle in all fifty states.²⁵⁰⁶

1051. The California Commission asserts that ceilings for transport and termination present problems because a ceiling based on, for example, switched access rates would have to take into account widely varying rates among states. The California Commission is also opposed to price floors for call termination because they may conflict with bill-and-keep arrangements.²⁵⁰⁷ GST opposes the use of access charges to set reciprocal transport and termination rates because access charges are fundamentally based on rates of return.²⁵⁰⁸ TCI argues that there has been sufficient evidence compiled in state proceedings for the Commission to determine the price ceiling based on existing TSLRIC studies and suggests a price ceiling of 0.4 cents per minute of use.²⁵⁰⁹ The Illinois and Maryland commissions have

²⁵⁰³ GST comments at 39.

²⁵⁰⁴ Ohio Commission comments at 71-72, 78-79.

²⁵⁰⁵ MFS comments at 87.

²⁵⁰⁶ Jones Intercable comments at 29-30.

²⁵⁰⁷ California Commission comments at 43; *see also* Florida Commission comments at 40 (setting charges for the transport and termination of local exchange traffic should be left up to the states because of the unique geographical and demographic characteristics of each state).

²⁵⁰⁸ GST comments at 39-40.

²⁵⁰⁹ TCI comments at 40-43.

adopted rates for the termination of traffic based on incremental cost studies. The Illinois Commission has adopted a rate equal to 0.5 cents (\$0.005) per minute of use for termination from the end office switch. Maryland has adopted a rate equal to 0.3 cents (\$0.003) per minute of use for termination from the end office switch. Both commissions adopted slightly higher rates for transport and termination via tandem switches equal to 0.5 cents (\$0.005) in Maryland and 0.75 cents (\$0.0075) in Illinois.²⁵¹⁰

1052. Most commenters support the requirement that dedicated transport services be priced on a flat-rated basis.²⁵¹¹ For example, the Ohio Commission asserts that all LECs should offer a reciprocal compensation structure that consists of both flat-rated elements and usage-sensitive elements, in order to satisfy the requirement that the rate structure reflect the way in which costs are incurred by the providing LEC.²⁵¹² According to Lincoln Telephone, the connection between an incumbent LEC's central office and an interconnector's network should be priced as a flat-rated unbundled network element.²⁵¹³ The Massachusetts Attorney General recommends that termination charges be flat-rated and capacity-based.²⁵¹⁴ This capacity-based, flat-rated reciprocal compensation charge would be based on port charges, measured at the peak busy hour of the month, to determine the relative traffic flow over the respective networks. The Massachusetts Attorney General further argues that, in a highly competitive market where services and prices would be continuously changing, rates charged by minutes of use will distort marketing and investment decisions away from the efficient path.²⁵¹⁵ Cox contends capacity-cost approaches should be used as the basic standard for setting transport and termination rates because costs are incurred in that manner.²⁵¹⁶ Additionally, Cox argues a capacity-cost approach addresses peak-load pricing problems because an interconnecting carrier is effectively reserving and paying for a slice of capacity on a full-time basis.²⁵¹⁷ Other carriers support a per-minute charge for transport and

²⁵¹⁰ These cost studies, and others, are discussed in greater detail in *supra*, Section VII.C.3.

²⁵¹¹ See, e.g., USTA comments at 80; Time Warner comments at 91-92; NEXTLINK comments at 34-35; Mass. Attorney General comments at 16-17, 22-23; CFA/CU comments at 51; Washington Commission comments at 3; Sprint comments at 79.

²⁵¹² Ohio Commission comments at 68-69.

²⁵¹³ Lincoln Tel. comments at 22.

²⁵¹⁴ Mass. Attorney General comments at 15-16.

²⁵¹⁵ Mass. Attorney General comments at 16-17; see also CFA/CU comments at 55-56; Washington Commission comments at 3.

²⁵¹⁶ Cox comments at Exhibit 3 (Bargaining Incentives and Interconnection), p. 7.

²⁵¹⁷ *Id.*

termination.²⁵¹⁸ In addition to a rate based on minutes of use, the Maryland Commission does not oppose flat-rated options for termination of traffic based on capacity costs measured at peak hours.²⁵¹⁹ BellSouth adds that usage-based charging is relatively more favorable to smaller competitors and facilities-based charging is relatively more favorable to larger competitors.²⁵²⁰

1053. Numerous new entrants and state commissions support the use of an interim pricing mechanism and support the use of bill and keep as such an interim measure.²⁵²¹ In the *LEC-CMRS Interconnection* proceeding, most CMRS providers argue in support of an interim pricing approach for transport and termination arrangements while long-term solutions are pursued.²⁵²² Cincinnati Bell asserts that the suggestion that an interim mechanism may be necessary to offset bargaining power of incumbent LECs incorrectly assumes that the incumbent LEC will always have greater bargaining power in the process of negotiations.²⁵²³ Cincinnati Bell argues that, to the contrary, small and mid-size LECs will be at a disadvantage when they negotiate with large corporations.²⁵²⁴ LECs generally argue that, under the 1996 Act, the Commission is precluded from creating an interim pricing regime, and point to section 251(d)(3), which preserves state regulations over the obligations of LECs in certain circumstances, to support their argument.²⁵²⁵

²⁵¹⁸ See, e.g., MCI comments at 48-49; SBC comments at 50 n.91.

²⁵¹⁹ Maryland Commission comments at Attachment (Maryland Commission Order No. 72348), p. 33.

²⁵²⁰ BellSouth comments at Attachment (Interconnection and Economic Efficiency), p. 11.

²⁵²¹ See, e.g., GST comments at 34-35; AT&T comment at 69; Cox comments at 27-28, 38; Sprint comments at 87; Jones Intercable comments at 28-29; Citizens Utilities comments at 30; Telecommunication Resellers Ass'n comments at 54-55.

²⁵²² See, e.g., AirTouch comments in CC Docket No. 95-185 at 38-39.

²⁵²³ Cincinnati Bell comments at 25-26.

²⁵²⁴ *Id.*

²⁵²⁵ See, e.g., BellSouth comments in CC Docket No. 95-185 at 32.

c. Discussion

(1) Statutory Standard

1054. We conclude that the pricing standards established by section 252(d)(1) for interconnection and unbundled elements, and by section 252(d)(2) for transport and termination of traffic, are sufficiently similar to permit the use of the same general methodologies for establishing rates under both statutory provisions. Section 252(d)(2) states that reciprocal compensation rates for transport and termination shall be based on "a reasonable approximation of the additional costs of terminating such calls."²⁵²⁶ Moreover, there is some substitutability between the new entrant's use of unbundled network elements for transporting traffic and its use of transport under section 252(d)(2). Depending on the interconnection arrangements, carriers may transport traffic to the competing carriers' end offices or hand traffic off to competing carriers at meet points for termination on the competing carriers' networks. Transport of traffic for termination on a competing carrier's network is, therefore, largely indistinguishable from transport for termination of calls on a carrier's own network. Thus, we conclude that transport of traffic should be priced based on the same cost-based standard, whether it is transport using unbundled elements or transport of traffic that originated on a competing carrier's network. We, therefore, find that the "additional cost" standard permits the use of the forward-looking, economic cost-based pricing standard that we are establishing for interconnection and unbundled elements.²⁵²⁷

(2) Pricing Rule

1055. States have three options for establishing transport and termination rate levels. A state commission may conduct a thorough review of economic studies prepared using the TELRIC-based methodology outlined above in the section on the pricing of interconnection and unbundled elements.²⁵²⁸ Alternatively, the state may adopt a default price pursuant to the default proxies outlined below. If the state adopts a default price, it must either commence review of a TELRIC-based economic cost study, request that this Commission review such a study, or subsequently modify the default price in accordance with any revised proxies we may adopt. As previously noted, we intend to commence a future rulemaking on developing proxies using a generic cost model, and to complete such proceeding in the first quarter of 1997. As a third alternative, in some circumstances states may order a "bill and keep" arrangement, as discussed below.

²⁵²⁶ 47 U.S.C. § 252(d)(2)(A)(ii).

²⁵²⁷ See *supra*, Section VII.B.

²⁵²⁸ *Id.*

(3) Cost-Based Pricing Methodology

1056. Consistent with our conclusions about the pricing of interconnection and unbundled network elements, we conclude that states that elect to set rates through a cost study must use the forward-looking economic cost-based methodology, which is described in greater detail above, in establishing rates for reciprocal transport and termination when arbitrating interconnection arrangements.²⁵²⁹ We find that section 252(d)(2)(B)(ii), which indicates that section 252(d)(2) shall not be construed to "authorize the Commission or any State to engage in any rate regulation proceeding to establish with particularity the additional costs of transporting or terminating calls,"²⁵³⁰ does not preclude states or this Commission from reviewing forward-looking economic cost studies. First, we believe that Congress intended the term "rate regulation proceeding" in section 252(d)(2)(B)(ii) to mean the same thing as "a rate-of-return or other rate-based proceeding" in section 252(d)(1)(A)(i). In the section on the pricing of interconnection and unbundled elements above, we conclude that the statutory prohibition of the use of such proceedings is intended to foreclose the use of traditional rate case proceedings using rate-of-return regulation. Moreover, forward-looking economic cost studies typically involve "a reasonable approximation of the additional cost,"²⁵³¹ rather than determining such costs "with particularity," such as by measuring labor costs with detailed time and motion studies.

1057. We find that, once a call has been delivered to the incumbent LEC end office serving the called party, the "additional cost" to the LEC of terminating a call that originates on a competing carrier's network primarily consists of the traffic-sensitive component of local switching. The network elements involved with the termination of traffic include the end-office switch and local loop. The costs of local loops and line ports associated with local switches do not vary in proportion to the number of calls terminated over these facilities.²⁵³² We conclude that such non-traffic sensitive costs should not be considered "additional costs" when a LEC terminates a call that originated on the network of a competing carrier. For the purposes of setting rates under section 252(d)(2), only that portion of the forward-looking, economic cost of end-office switching that is recovered on a usage-sensitive basis constitutes an "additional cost" to be recovered through termination charges.

²⁵²⁹ See *supra*, Section VII.B. for a complete discussion of forward-looking economic cost-based methodology.

²⁵³⁰ 47 U.S.C. § 252(d)(2)(B)(ii).

²⁵³¹ 47 U.S.C. § 252(d)(2)(A)(ii).

²⁵³² The duty to terminate calls that originate on the network of a competitor does not directly affect the number of calls routed to a particular end user and any costs that result from inadequate loop capacity are, therefore, not considered "additional costs."

1058. Rates for termination established pursuant to a TELRIC-based methodology may recover a reasonable allocation of common costs. A rate equal to incremental costs may not compensate carriers fully for transporting and terminating traffic when common costs are present. We therefore reject the argument by some commenters that "additional costs" may not include a reasonable allocation of forward-looking common costs. We recognize that, as noted by Time Warner, call termination is an essential element in completing calls because competitors are required to use the incumbent LECs' existing networks to terminate calls to incumbent LEC customers.²⁵³³ The 1996 Act envisions a seamless interconnection of competing networks, rather than the development of redundant, ubiquitous networks throughout the nation. In order to terminate traffic ubiquitously to other companies' local customers, all LECs are given the right to use termination services from those companies rather than construct facilities to everyone. While, on the originating end, carriers have different options to reach their revenue-paying customers -- including their own network facilities, purchasing access to unbundled elements of the incumbent LEC, or resale -- they have no realistic alternatives for terminating traffic destined for competing carriers' subscribers other than to use those carriers' networks. Thus, all carriers -- incumbent LECs as well as competing carriers -- have a greater incentive and opportunity to charge prices in excess of economically efficient levels on the terminating end. To ensure that rates for reciprocal compensation make possible efficient competitive entry, we conclude that termination rates should include an allocation of forward-looking common costs that is no greater proportionally than that allocated to unbundled local loops, which, as discussed above, should be relatively low.²⁵³⁴ Additionally, we conclude that rates for the transport and termination of traffic shall not include an element that allows incumbent LECs to recover any lost contribution to basic, local service rates represented by the interconnecting carriers' service, because such an element would be inconsistent with the statutory requirement that rates for transport and termination be based on additional costs.²⁵³⁵ In the section addressing prices for unbundled elements we conclude that the ECPR, which would allow incumbent LECs to recover such lost contributions, or collection of universal service costs through interconnection rates, leads to significant distortions in markets when existing retail prices are not cost-based.²⁵³⁶

1059. We also address the impact on small incumbent LECs. For example, the Western Alliance argues that it is especially important for small LECs to recover lost contributions and common costs through termination charges. We have considered the

²⁵³³ Time Warner comments at 50.

²⁵³⁴ See *supra*, Section VII.C.2.b.(1).

²⁵³⁵ See 47 U.S.C. § 252(d)(2).

²⁵³⁶ See *supra*, Section VII.B.2.b. for a discussion of the effect application of the ECPR would have on the market for local exchange service.

economic impact of our rules in this section on small incumbent LECs. For example, we conclude that termination rates for all LECs should include an allocation of forward-looking common costs, but find that the inclusion of an element for the recovery of lost contribution may lead to significant distortions in local exchange markets. We also note that certain small incumbent LECs are not subject to our rules under section 251(f)(1) of the 1996 Act, unless otherwise determined by a state commission, and certain other small incumbent LECs may seek relief from their state commissions from our rules under section 251(f)(2) of the 1996 Act.

(4) Default Proxies

1060. As with unbundled network elements, we recognize that it may not be feasible for some state commissions conducting or reviewing economic studies to establish transport and termination rates using our TELRIC-based pricing methodology within the time required for the arbitration process, particularly given some states' resource limitations. Thus, for the time being, we adopt a default price range of 0.2 cents (\$0.002) to 0.4 cents (\$0.004) per minute of use for calls handed off at the end-office switch. This default price range is based on the same proxies that apply to local switching as an unbundled network element. In establishing end-office termination rates, states may adopt a default termination price that is within our default price range or at either of the end points of the range. States should articulate the basis for selecting a particular price within this range. Thus, in arbitration proceedings, states must set the price for end office termination of traffic by: (1) using a forward-looking, economic cost study that complies with the forward-looking, economic-cost methodology set forth above; or (2) adopting a price less than or equal to 0.4 cents (\$0.004) per minute, and greater than or equal to 0.2 cents (\$0.002) per minute, pending the completion of such a forward-looking, economic cost study. We observe that the most credible studies in the record before us fall at the lower end of this range, and we encourage states to consider such evidence in their analysis. The adoption of a range of rates to serve as a default price range for interconnection agreements being arbitrated by the states provides carriers with a clearer understanding of the terms and conditions that will govern them if they fail to reach an agreement and helps to reduce the transaction costs of arbitration and litigation. We also find that states that have already adopted end-office termination rates based on an approach other than a full forward-looking cost study, either through arbitration or rulemaking proceedings, may keep such rates in effect, pending their review of a forward-looking cost study, as long as they do not exceed 0.5 cents (\$0.005) per minute. As discussed below, a state may also order a "bill and keep" arrangement subject to certain limitations. Additionally, our adoption of a default price range temporarily relieves small and mid-sized carriers from the burden of conducting forward-looking economic cost studies.²⁵³⁷

1061. Similarly, in establishing transport rates under sections 251(b)(5) and 252(d)(2),

²⁵³⁷ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

state commissions should be guided by the price proxies that we are establishing for unbundled transport elements discussed above.²⁵³⁸ States should explain the basis for selecting a particular default price subject to the applicable ceiling. Specifically, when interconnecting carriers hand off traffic at an incumbent LEC's tandem switch (or equivalent facilities of a carrier other than an incumbent LEC), the rates for the tandem switching and transmission from the tandem switch to end offices -- a portion of the "transport" component of transport and termination rates -- should be subject to the proxies that apply to the analogous unbundled network elements. Thus, for the time being, when states set rates for tandem switching under section 252(d)(2), they may set a default price at or below the default price ceiling that applies to the tandem switching unbundled element as an alternative to reviewing a forward-looking economic cost study using our TELRIC methodology.²⁵³⁹ Similarly, when states set rates for transmission facilities between tandem switches and end offices, they may establish rates equal to the default prices we are adopting for such transmission, as discussed above in the section on unbundled elements.²⁵⁴⁰

1062. Finally, in establishing the rates for transmission facilities that are dedicated to the transmission of traffic between two networks, state commissions should be guided by the default price level we are adopting for the unbundled element of dedicated transport.²⁵⁴¹ For such dedicated transport, we can envision several scenarios involving a local carrier that provides transmission facilities (the "providing carrier") and another local carrier with which it interconnects (the "interconnecting carrier"). The amount an interconnecting carrier pays for dedicated transport is to be proportional to its relative use of the dedicated facility. For example, if the providing carrier provides one-way trunks that the interconnecting carrier uses exclusively for sending terminating traffic to the providing carrier, then the interconnecting carrier is to pay the providing carrier a rate that recovers the full forward-looking economic cost of those trunks. The interconnecting carrier, however, should not be required to pay the providing carrier for one-way trunks in the opposite direction, which the providing carrier owns and uses to send its own traffic to the interconnecting carrier. Under an alternative scenario, if the providing carrier provides two-way trunks between its network and the interconnecting carrier's network, then the interconnecting carrier should not have to pay the providing carrier a rate that recovers the full cost of those trunks. These two-way trunks are used by the providing carrier to send terminating traffic to the interconnecting carrier, as well as by the interconnecting carrier to send terminating traffic to the providing carrier. Rather, the interconnecting carrier shall pay the providing carrier a rate that reflects only the

²⁵³⁸ See *supra*, Section VII.C.2.b.(3).

²⁵³⁹ *Id.*

²⁵⁴⁰ *Id.*

²⁵⁴¹ *Id.*

proportion of the trunk capacity that the interconnecting carrier uses to send terminating traffic to the providing carrier. This proportion may be measured either based on the total flow of traffic over the trunks, or based on the flow of traffic during peak periods.²⁵⁴² Carriers operating under arrangements which do not comport with the principles we have set forth above, shall be entitled to convert such arrangements so that each carrier is only paying for the transport of traffic it originates, as of the effective date of this order.

(5) Rate Structure

1063. Nearly all commenters agree that flat rates, rather than usage-sensitive rates, should apply to the purchase of dedicated facilities. As discussed in the NPRM, economic efficiency may generally be maximized when non-traffic sensitive services, such as the use of dedicated facilities for the transport of traffic, are priced on a flat-rated basis.²⁵⁴³ We, therefore, require all interconnecting parties to be offered the option of purchasing dedicated facilities, for the transport of traffic, on a flat-rated basis. As discussed by Lincoln Telephone, the connection between an incumbent LEC's end or tandem office and an interconnecting LEC's network is likely to be a dedicated facility. We recognize that the facility itself can be provided in a number of different ways -- by use of two service providers, by the other carrier, or jointly in a meet-point arrangement. We conclude first that, no matter what the specific arrangements, these costs should be recovered in a cost-causative manner and that usage-based charges should be limited to situations where costs are usage sensitive. In cases going to arbitration and in reviewing BOC statements of terms and conditions, the carrier actually providing the facility should presumptively be entitled to a rate that is set based on the forward-looking economic cost of providing the portion of the facility that is used for terminating traffic that originates on the network of a competing carrier. We recognize that negotiated agreements may incorporate flat-rated charges when it is efficient to do so and find that the presence of the arbitration default rule is likely to lead parties to negotiate efficient rate structures.

1064. We recognize that the costs of transporting and terminating traffic during peak and off-peak hours may not be the same. As suggested by the Massachusetts Attorney General, rates that are the same during peak and off-peak hours may not reflect the cost of using the network and could lead to inefficient use of the network. The differences in the cost of transporting and terminating traffic during peak and off-peak hours, however, are likely to vary depending on the network, and the amount and type of traffic terminated at a particular switch. For example, peak periods may vary within a local service area depending upon whether the switch is located in a business or residential area. As a result, there may be administrative difficulties in establishing peak-load pricing schemes that may outweigh the

²⁵⁴² See *infra*, Section XI.A.3.c.(5).

²⁵⁴³ NPRM at para. 150.

benefits of such schemes. The negotiating parties, however, are likely to be in a position to more accurately determine how traffic patterns will adjust to peak-load pricing schemes and we encourage parties to address such pricing schemes in the negotiation process. For similar reasons, we neither require nor forbid states from adopting rates that reflect peak and off-peak costs. We hope some states will evaluate the benefits and costs of pricing schemes that consist of different rates for peak and off-peak traffic. We do require, however, that peak-load pricing schemes, adopted through the arbitration process, comply with our default price level if not based on a forward-looking cost study (e.g., the average rate, weighted by the projected relative minutes of use during peak and off-peak periods, should fall within our default price range of 0.2 to 0.4 cents or the level determined by an incremental cost study).

(6) Interim Transport and Termination Rate Levels

1065. We are concerned that some new entrants that do not already have interconnection arrangements with incumbent LECs may face delays in initiating service solely because of the need to negotiate transport and termination arrangements with the incumbent LEC. In particular, a new entrant that has already constructed facilities may have a relatively weak bargaining position because it may be forced to choose either to accept transport and termination rates not in accord with these rules or to delay its commencement of service until the conclusion of the arbitration and state approval process. To promote the Act's goal of rapid competition in the local exchange, we order incumbent LECs upon request from new entrants to provide transport and termination of traffic, on an interim basis, pending resolution of negotiation and arbitration regarding transport and termination prices, and approval by the state commission. A carrier may take advantage of this interim arrangement only after it has requested negotiation with the incumbent LEC. The interim arrangement shall cease to be in effect when one of the following occurs: (1) an agreement has been negotiated and approved; (2) an agreement has been arbitrated and approved; or (3) the period for requesting arbitration has passed with no such request. We also conclude that interim prices for transport and termination shall be symmetrical. Because the purpose of this interim termination requirement is to permit parties without existing interconnection agreements to enter the market expeditiously, this requirement shall not apply with respect to requesting carriers that have existing interconnection arrangements that provide for termination of local traffic by the incumbent LEC. The ability to interconnect with an incumbent LEC prior to the completion of a forward-looking, economic cost study, based on an interim presumptive price ceiling, allows carriers, including small entrants, to enter into local exchange service expeditiously.²⁵⁴⁴

1066. In states that have already conducted or reviewed forward-looking economic cost studies and promulgated transport and termination rates based on such studies, an incumbent LEC receiving a request for interim transport and termination shall use these state-determined rates as interim transport and termination rates. In states that have not conducted

²⁵⁴⁴ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

or reviewed a forward-looking economic cost study, but have set rates for transport and termination of traffic consistent with the default price ranges and ceilings discussed above, an incumbent LEC shall use these state-determined rates as interim rates.²⁵⁴⁵ In states that have neither set rates consistent with the default price ceilings and ranges nor reviewed or conducted forward-looking economic cost studies, we must establish an interim default price in order to facilitate rapid competition in the local exchange market. In those states, an incumbent LEC shall set interim rates at the default ceilings for end-office switching (0.4 cents per minute of use), tandem switching (0.15 cents per minute of use), and transport described above.²⁵⁴⁶ Using the ceiling as a default interim price, pending a state commission's completion of a forward-looking economic cost analysis, should ensure that both the incumbent LEC and the competing provider recovers no less than their full transport and termination costs. We note, however, that the most credible evidence in the record suggests that the actual forward-looking economic cost of end-office switching is closer to 0.2 cents (\$0.002) per minute of use than the ceiling of 0.4 cents (\$0.004) per minute of use.²⁵⁴⁷ States must adopt "true-up" mechanisms to ensure that no carrier is disadvantaged by an interim rate that differs from the final rate established pursuant to arbitration.

1067. We conclude that section 251, in conjunction with our broad rulemaking authority under section 4(i), provides us with authority to create interim pricing rules to facilitate market entry. Because section 251(d)(1) gives the FCC authority "to establish regulations to implement the requirements of this section," we find that section 251(d)(1) gives the Commission authority to establish interim regulations that address the "just and reasonable" rates for the "reciprocal compensation" requirement of section 251(b)(5), subject to the preservation requirements of section 251(d)(3). Courts have upheld our adoption of interim compensation arrangements pursuant to our authority under section 4(i) of the 1934 Communications Act on numerous occasions in the past.²⁵⁴⁸ In particular, we have authority, under section 4(i), to set interim rates subject to a later "true-up" when final rates are established.²⁵⁴⁹ We therefore conclude that the default prices discussed above need not in all

²⁵⁴⁵ See *supra*, Section XI.A.3.c.(4).

²⁵⁴⁶ *Id.*

²⁵⁴⁷ See *supra*, Section XI.A.3.c.(4).

²⁵⁴⁸ See *New England Tel. and Tel. Co. v. FCC*, 826 F.2d 1101 (D.C. Cir 1987); *North American Telecommunications Association v. FCC*, 772 F.2d 1092 (7th Cir. 1085); *Lincoln Tel. and Tel. Co. v. FCC*, 659 F.2d (D.C. Cir. 1989).

²⁵⁴⁹ "[T]he Commission's establishment of an interim billing and collection arrangement was both a helpful and necessary step for the Commission to take in implementing its 'immediate' interconnection order." *Lincoln Telephone & Telegraph Co. v. FCC*, 659 F.2d 1092, 1107 (D.C.Cir.1981) (upholding Commission decision requiring an incumbent LEC to interconnect with MCI immediately, in order not to delay interconnection, at

instances await the conclusion of the negotiation, arbitration, and state approval process set forth in section 252, but must nevertheless be in accordance with the requirements of section 251(d)(3) preserving state access regulations. We also observe that we proposed a similar interim transport and termination arrangement, albeit with different rate levels, in our NPRM in the *LEC-CMRS Interconnection* proceeding.²⁵⁵⁰

1068. We have considered the economic impact of our rules in this section on small incumbent LECs. For example, Cincinnati Bell asserts that interim mechanisms are not required because large corporations are not disadvantaged by unequal bargaining power in negotiations with small and mid-size incumbent LECs. We do not adopt Cincinnati Bell's position because some new entrants, regardless of their size, that do not already have interconnection arrangements with incumbent LECs may face delays in initiating service solely because of the need to negotiate transport and termination arrangements with the incumbent LEC. We believe that the adoption of interim rates, subject to a "true-up," advances the pro-competitive goals of the statute. We also note that certain small incumbent LECs are not subject to our rules under section 251(f)(1) of the 1996 Act, unless otherwise determined by a state commission, and certain other small incumbent LECs may seek relief from their state commissions from our rules under section 251(f)(2) of the 1996 Act.

4. Symmetry

a. Background

1069. Symmetrical compensation arrangements are those in which the rate paid by an incumbent LEC to another telecommunications carrier for transport and termination of traffic originated by the incumbent LEC is the same as the rate the incumbent LEC charges to transport and terminate traffic originated by the other telecommunications carrier. Incumbent LECs are not likely to purchase interconnection or unbundled elements from competitive LECs, except for termination of traffic, and possibly transport.²⁵⁵¹ In the NPRM, we sought comment on whether rate symmetry requirements are consistent with the statutory requirement that rates set by states for transport and termination of traffic be based on "costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier," and "a reasonable approximation of the additional

interim rates subject to later adjustment); see also *FTC Communications v. FCC*, 750 F.2d 226 (2d Cir.1984) (affirming Commission's authority under Section 4(i) to set interim rates for interconnection between the domestic record carrier, Western Union, and international record carriers, subject to an accounting order, pending the conclusion of a rulemaking to set permanent rates replacing expired, contract-based rates).

²⁵⁵⁰ *LEC-CMRS Interconnection NPRM* at para. 60.

²⁵⁵¹ NPRM at para. 235.

costs of terminating such calls.²⁵⁵²

1070. In addition, we noted in the NPRM that the Illinois, Maryland, and New York commissions have established different rates for termination of traffic on an incumbent LEC's network, depending upon whether the traffic is handed off at the incumbent LEC's end office or tandem switch.²⁵⁵³ We also observed that California and Michigan have established one rate that applies to transport and termination of all competing local exchange carrier traffic on incumbent LEC networks, regardless of whether the traffic is handed off at the incumbent LEC's end office or tandem switch, although this rate does not currently apply to CMRS.²⁵⁵⁴ We, therefore, address whether rates for transport and termination should be symmetrical and consist of only a single rate regardless of where the call is handed off, or if rates should be priced on an element-by-element basis.

1071. In the *LEC-CMRS Interconnection NPRM*, we sought comment on whether incumbent LECs were utilizing their greater bargaining power to negotiate with wireless carriers interconnection agreements that did not reflect principles of mutual compensation. We sought comment on whether we should institute some procedure or mechanism in addition to our section 208 enforcement process to ensure that incumbent LECs comply with our existing rules requiring mutual compensation.²⁵⁵⁵

b. Comments

1072. *Local Competition NPRM*. Incumbent LECs argue that a symmetrical reciprocal compensation requirement does not comport with the Act.²⁵⁵⁶ GTE contends that the symmetry rule violates the requirement of section 252(d)(2) that rates be based on a reasonable estimate of the additional costs of transport and termination.²⁵⁵⁷ In addition, Lincoln Telephone argues that rates for the transport and termination of traffic should not be symmetrical because small and mid-sized companies can incur higher costs transporting and terminating traffic than larger carriers.²⁵⁵⁸ TDS argues that a symmetrical pricing standard

²⁵⁵² 47 U.S.C. § 252(d)(2).

²⁵⁵³ NPRM at para. 239.

²⁵⁵⁴ *Id.*

²⁵⁵⁵ *LEC-CMRS Interconnection NPRM*, para. 81.

²⁵⁵⁶ See, e.g., BellSouth comments at 72-73; SBC comments at 51-52; GTE reply at 29.

²⁵⁵⁷ GTE reply at 29.

²⁵⁵⁸ Lincoln Tel. reply at 11-12.

fails to fulfill the basic statutory directive that each carrier recover its costs.²⁵⁵⁹ BellSouth contends that, because the costs of an incumbent LEC and new entrant are likely to be quite different, the Commission does not have the authority to contravene the mutual and reciprocal recovery language of section 252(d)(2) and require symmetry.²⁵⁶⁰ Furthermore, MECA, which represents Michigan exchange carriers, asserts that competing LECs should be required to compensate each other for terminating traffic at a cost-based rate for each carrier.²⁵⁶¹ MECA argues that compensation rates cannot be uniform because each carrier has its own unique cost structure.²⁵⁶² RTC also asserts that proposals such as symmetry do not consider the costs involved in the use of another's carriers network.²⁵⁶³

1073. On the other hand, state commissions, as well as several other commenters, support symmetrical reciprocal compensation mechanisms.²⁵⁶⁴ Several commenters contend that symmetrical rates are mutual and reciprocal, and therefore only symmetrical rates can satisfy the statutory standards required under section 252(d)(2).²⁵⁶⁵ MFS notes that Congress required that compensation rates be "mutual and reciprocal" and based on a "reasonable approximation of additional costs," and expressly prohibited any requirement of actual cost studies.²⁵⁶⁶ According to MFS "these interrelated provisions indicate Congress's intention that optimal economic costs, rather than actual or historical costs, should be used in setting these rates."²⁵⁶⁷ MFS also argues that, while actual costs may vary from one carrier to the next, the optimal economic cost of performing the transport and termination function is the same for all carriers operating within the same geographic area.²⁵⁶⁸ Therefore, it asserts that "[o]nly

²⁵⁵⁹ TDS comments at 23.

²⁵⁶⁰ BellSouth comments at 72-73.

²⁵⁶¹ MECA comments at 67.

²⁵⁶² *Id.*; see also Lincoln Tel. reply at 11.

²⁵⁶³ RTC comments at 23.

²⁵⁶⁴ See, e.g., Alabama Commission comments at 32; AT&T comments at 69; Louisiana Commission comments at 7-8; Mass. Commission comments at 13; MCI comments at 50.

²⁵⁶⁵ MFS comments at 82-83; GST comments at 40-42; see also Texas Public Utility Counsel comments at 52-54 (arguing that symmetrical rates are consistent with the Act as long as rates are based on TSLRIC).

²⁵⁶⁶ MFS comments at 82.

²⁵⁶⁷ *Id.*

²⁵⁶⁸ *Id.*; see also Texas Public Utility Counsel comments at 52-54 (arguing that symmetrical rates based on TSLRIC should not vary much across companies).

symmetrical rates are 'mutual and reciprocal,' and only such rates are consistent with the provisions of Sec. 252(d)(2).²⁵⁶⁹

1074. Several potential new entrants believe that requiring symmetrical reciprocal compensation is needed to ensure efficient competition.²⁵⁷⁰ MCI argues that the reciprocal compensation will be of much greater importance to competing carriers than to incumbent LECs because initially calls terminating on other carriers' networks will account for a far greater share of entrants' traffic than is the case for incumbent LECs, which will still be terminating most of their local traffic on their own networks.²⁵⁷¹ Therefore, MCI asserts that the compensation rate charged for transport and termination will comprise a significant portion of the competing carrier's overall cost of providing service.²⁵⁷² MCI argues that incumbent LECs have every reason to attempt to use their superior bargaining position in negotiations to obtain termination rates that are as high as possible, and asserts that a symmetrical compensation rate will reduce the incentive of incumbent LECs to inflate their termination rates.²⁵⁷³ In addition, MFS asserts that asymmetrical rates burden new entrants because incumbent LECs have greater bargaining power and access to information.²⁵⁷⁴ The Alabama Commission contends that equal rates eliminate incumbent LECs' ability to exploit the system.²⁵⁷⁵

1075. Some prospective local entrants contend that requiring symmetrical reciprocal compensation arrangements will lead to economically efficient outcomes.²⁵⁷⁶ MFS contends that setting symmetrical rates based on the cost of optimal technology gives all carriers an incentive to use the most efficient network design in order to reduce costs.²⁵⁷⁷ Further, GST argues that the long-term efficient cost of transporting and terminating traffic should be identical for all providers, based upon their adoption of the most efficient technology, even if

²⁵⁶⁹ MFS comments at 82 (emphasis in original); *see also* WinStar comments at 24-26; GST comments at 40-42.

²⁵⁷⁰ *See, e.g.*, MCI comments at 50-51; MFS comments at 82-84.

²⁵⁷¹ MCI comments at 49-50.

²⁵⁷² *Id.*

²⁵⁷³ *Id.*

²⁵⁷⁴ MFS comments at 83.

²⁵⁷⁵ Alabama Commission comments at 32.

²⁵⁷⁶ *See, e.g.*, MFS comments at 83-84; WinStar comments at 26.

²⁵⁷⁷ MFS comments at 84.

their short-term costs based upon today's technology are different.²⁵⁷⁸ WinStar argues that asymmetrical cost-based compensation would penalize new entrants for deploying state-of-the-art technology. According to WinStar, such a system would require new entrants to absorb the costs of the incumbent LECs' less efficient networks by paying higher termination rates, while entrants would be required to pass cost savings from their more efficient networks to the less efficient incumbent LECs by charging lower terminations rates.²⁵⁷⁹ WinStar asserts that incumbent LECs have no incentive to increase the efficiency of their own operations as long as they remain free to recover the costs of terminating traffic through higher termination rates than those of their competitors.²⁵⁸⁰

1076. Many state commissions and potential new entrants contend that symmetrical rates should be based on the incumbent LEC's costs. AT&T argues that such an approach provides carriers with the proper incentives to minimize costs and has the added benefit of being administratively manageable, given that incumbent LECs will already be performing TSLRIC studies.²⁵⁸¹ In addition, the Massachusetts Commission notes that entrants may not have the expertise or ability to calculate costs for specific services, and supports use of the incumbent LECs' costs to calculate reciprocal compensation rates. The Alabama Commission asserts, however, that reciprocal compensation rates should be set equal to the transport and termination rates charged by entrants.²⁵⁸² Noting that some new entrants may have higher costs than incumbent LECs, several commenters argue that, while reciprocal compensation generally should be symmetrical based on incumbent LECs' costs, new entrants should be able to prove their costs are higher than the incumbent LECs' rates.²⁵⁸³ Lincoln Telephone, on the other hand, opposes a symmetry requirement because it "achieves expediency at the expense of economic efficiency, thereby eliminating some of the benefits of competition under the Act."²⁵⁸⁴

1077. Several commenters, including many states, contend that this issue should be

²⁵⁷⁸ GST comments at 35-38.

²⁵⁷⁹ WinStar comments at 26.

²⁵⁸⁰ *Id.*

²⁵⁸¹ AT&T comments at 69; *see also* Texas Public Utility Counsel comments at 52-54.

²⁵⁸² Alabama Commission comments at 32.

²⁵⁸³ *See, e.g.,* Mass. Commission comments at 13; Sprint comments at 83.

²⁵⁸⁴ Lincoln Tel. comments at 22.

left to the states or parties to decide.²⁵⁸⁵ The California Commission suggests that symmetry should be encouraged by the Commission but not mandated.²⁵⁸⁶ NYNEX claims that, although the statute does not require symmetrical rates, parties may agree to such a scheme in a negotiated agreement.²⁵⁸⁷

1078. Certain commenters argue that any symmetry requirement should only apply to separate rate elements. The Ohio Commission supports symmetrical rates on a rate element-by-rate element basis (e.g., local switching rate element, local transport rate element).²⁵⁸⁸ For example, the Ohio Commission would not endorse symmetrical rates for transport and termination where a new entrant requests interconnection with an incumbent LEC's tandem office, and the new entrant does not have tandem capabilities.²⁵⁸⁹ In that case, terminating a call on the new entrant's network typically would involve only the use of local switching and local transport between the interconnection point and the LEC's switch. In contrast, terminating a call on the incumbent LEC's network often is likely to involve the use of the incumbent LEC's tandem switch in addition to the local switch and the transport between the two switching offices.²⁵⁹⁰ Bell Atlantic argues that the reciprocal compensation rate for calls delivered to an access tandem for which the terminating carrier will incur the cost of tandem switching and transport should be allowed to be higher than rates for calls delivered to an end office, which do not incur those additional costs.²⁵⁹¹

1079. MFS opposes a two-tier termination rate structure under which one rate applies for traffic routed through an incumbent LEC's tandem switch, and a lower rate applies to traffic directly trunked to an incumbent LEC's end office. MFS asserts that these rate structures are inherently non-reciprocal because non-incumbent LECs typically do not operate separate tandem and end-office hierarchies.²⁵⁹² Time Warner argues that transport and termination based on incumbent LECs' historical choices of network architecture penalizes

²⁵⁸⁵ See, e.g., Ohio Commission comments at 73-75; Illinois Commission comments at 79-80; Pennsylvania Commission comments at 40; Ohio Consumers' Counsel reply at 24.

²⁵⁸⁶ California Commission comments at 44.

²⁵⁸⁷ NYNEX reply at 43-44.

²⁵⁸⁸ Ohio Commission comments at 73-75

²⁵⁸⁹ *Id.* at 73-74.

²⁵⁹⁰ *Id.*

²⁵⁹¹ Bell Atlantic comments at 43.

²⁵⁹² MFS comments at 77-78; see also NCTA reply at 14-15.

new LECs that deploy different architectures, even when that architecture is more efficient.²⁵⁹³ TCI argues that higher charges for routing calls through tandem switches rather than directly through the incumbent LEC's end offices will discourage carriers from routing traffic through tandem switches, even when it is efficient to do so.²⁵⁹⁴

1080. *LEC-CMRS Interconnection NPRM.* Many CMRS providers contend that they are unable to negotiate interconnection arrangements based on mutual or reciprocal compensation because of incumbent LEC bargaining power.²⁵⁹⁵ In its reply comments, Omnipoint asserts that many interconnection agreements across the CMRS industry reflect a general incumbent LEC unwillingness to provide reciprocal compensation.²⁵⁹⁶ SBC argues, however, that CMRS providers have significant bargaining power and numerous options for interconnection.²⁵⁹⁷ Ameritech states that it continues to fulfill the principles of mutual compensation in all of its CMRS compensation arrangements.²⁵⁹⁸

1081. Although the incumbent LECs generally contend that good faith negotiations are working well,²⁵⁹⁹ most CMRS providers comment that the negotiation process works poorly.²⁶⁰⁰ According to AT&T, the problem of achieving mutual compensation is further compounded because incumbent LECs not only charge rates that bear no relationship to their costs but also refuse to compensate CMRS providers for termination of landline-originated calls.²⁶⁰¹ In many instances, incumbent LECs even charge CMRS providers for terminating

²⁵⁹³ Time Warner comments at 87-88; *see also* Continental comments at 13-14; Winstar comments at 26.

²⁵⁹⁴ TCI comments at 28.

²⁵⁹⁵ *See, e.g.,* Nextel comments in CC Docket No. 95-185 at 5; Tracer reply in CC Docket No. 95-185 at 8; Vanguard comments in CC Docket No. 95-185 at 6; *see also* CTIA comments in CC Docket No. 95-185 at 8.

²⁵⁹⁶ Omnipoint reply in CC Docket No. 95-185 at 3-7; *see also* RCC comments in CC Docket No. 95-185 at 5; 360 Degrees comments in CC Docket No. 95-185 at 3; Western Wireless comments in CC Docket No. 95-185 at 13.

²⁵⁹⁷ SBC comments in CC Docket No. 95-185 at 13.

²⁵⁹⁸ Ameritech comments in CC Docket No. 95-185 at 4.

²⁵⁹⁹ *See, e.g.,* GTE comments in CC Docket No. 95-185 at 18; Ameritech comments in CC Docket No. 95-185 at 4.

²⁶⁰⁰ *See, e.g.,* APC/Sprint Joint comments in CC Docket No. 95-185 at 11; PCIA reply in CC Docket No. 95-185 at 6-8; *see also* Cox comments in CC Docket No. 95-185 at 12-16; AT&T reply in CC Docket No. 95-185 at 4-8.

²⁶⁰¹ AT&T comments in CC Docket No. 95-185 at 8; *see also* Western Wireless comments in CC Docket No. 95-185 at 13; New Par comments in CC Docket No. 95-185 at 5.

incumbent LEC-originated calls.²⁶⁰² GTE, however, states that it does not charge CMRS providers for land-to-mobile traffic.²⁶⁰³ California has rejected the principle of mutual compensation for interconnection, reasoning that such a policy would lead to a calling-party-pays system, which in turn could lead to an increase in the cost of basic telephone service.²⁶⁰⁴ CMRS providers report that they receive mutual compensation from only a handful of the incumbent LECs with which they interconnect.²⁶⁰⁵

1082. CMRS providers generally agree that many interconnection arrangements result in unjust, unreasonable and discriminatory interconnection rates, terms and conditions.²⁶⁰⁶ According to Cox, the average incremental cost of call termination, expressed on a per minute basis is .20 cents, but the average charge for cellular interconnection is currently 3 cents per minute.²⁶⁰⁷ Similarly, Comcast states that the aggregate charge it pays Bell Atlantic for call termination is 2.5 cents per minute, or 12.5 times the average incremental cost of 0.2 cents.²⁶⁰⁸ In contrast, the incumbent LECs assert that incumbent LEC interconnection rates have provided for reasonable charges.²⁶⁰⁹ A few incumbent LECs also point to the lack of interconnection rate complaints filed in their respective regions as evidence of reasonable rates.²⁶¹⁰ Cox responds that "the fact that few complaints have been filed does not lead to the conclusion that existing agreements are reasonable, let alone that they promote

²⁶⁰² See, e.g., Arch comments in CC Docket No. 95-185 at 3; Centennial comments in CC Docket No. 95-185 at 9; Century comments in CC Docket No. 95-185 at 4; CMT comments in CC Docket No. 95-185 at 4; Nextel comments in CC Docket No. 95-185 at 5.

²⁶⁰³ GTE comments in CC Docket No. 95-185 at 19-20.

²⁶⁰⁴ California Commission comments in CC Docket No. 95-185 at 6.

²⁶⁰⁵ See, e.g., Bell Atlantic/NYNEX Mobile comments in CC Docket No. 95-185 at 4-5.

²⁶⁰⁶ See, e.g., Comcast comments in CC Docket No. 95-185 at 4; Vanguard comments in CC Docket No. 95-185 at 7.

²⁶⁰⁷ Cox comments in CC Docket No. 95-185 at 13.

²⁶⁰⁸ Comcast comments in CC Docket No. 95-185 at 5-6.

²⁶⁰⁹ See, e.g., Pacific Bell reply in CC Docket No. 95-185 at 16-27; U S West comments in Docket 95-185 at 6-8.

²⁶¹⁰ See, e.g., Bell Atlantic comments in CC Docket No. 95-185 at 9-11; NYNEX comments in CC Docket No. 95-185 at 13-15, 22-23; Ameritech comments in CC Docket No. 95-185 at 4; USTA comments in CC Docket No. 95-185 at 7.

competition.²⁶¹¹ U S West contends that, until the local rate subsidy issue is addressed, reform in CMRS interconnection charges will not come to fruition.²⁶¹²

1083. The incumbent LECs further assert that, aside from anecdotal commentary, CMRS providers submit no evidence that their market entry or growth has been impeded by state or incumbent LEC action with respect to interconnection.²⁶¹³ The incumbent LECs argue that CMRS is developing rapidly under existing compensation arrangements and therefore current interconnection policies apparently do not pose a barrier to CMRS competition.²⁶¹⁴ U S West contends that CMRS providers have benefitted from negotiations that have resulted in declining interconnection charges as well as added flexibility with the introduction of calling-party-pays and wide area calling options.²⁶¹⁵ Many CMRS providers contend, however, that the industry may have grown faster had it not been impeded by unreasonable interconnection rates.²⁶¹⁶ Some incumbent LECs also point out that interconnection charges only represent a small percentage of a CMRS provider's total operating costs.²⁶¹⁷ But according to Airtouch, interconnection charges represent a growing proportion of CMRS costs.²⁶¹⁸

1084. According to most paging companies, incumbent LEC abuses are especially acute for narrowband CMRS providers.²⁶¹⁹ Because virtually 100 percent of paging calls are originated on incumbent LEC networks and terminated on CMRS networks, incumbent LEC

²⁶¹¹ Cox reply in CC Docket No. 95-185 at 6; *see also* New Par reply in CC Docket No. 95-185 at 7; PageNet reply CC Docket No. 95-185 at 5-7.

²⁶¹² US West reply in CC Docket No. 95-185 at 5. US West alleges that access and local interconnection must be priced above cost to provide a subsidy to local residential services that remain priced below cost.

²⁶¹³ *See, e.g.*, NYNEX reply in CC Docket No. 95-185 at 4; Pacific Bell reply in CC Docket No. 95-185 at 13-16.

²⁶¹⁴ *See, e.g.*, USTA reply in CC Docket No. 95-185 at 2-5.

²⁶¹⁵ US West comments in CC Docket No. 95-185 at 7-12.

²⁶¹⁶ *See, e.g.*, Vanguard reply in CC Docket No. 95-185 at 9; PageNet reply in CC Docket No. 95-185 at 7.

²⁶¹⁷ US West CC Docket No. 95-185 comments at 16; USTA reply in CC Docket No. 95-185 at 4-5. SBC estimates that interconnection charges represent 5.5 to 7 percent of a CMRS provider's total operating costs. SBC reply in CC Docket No. 95-185 at 18.

²⁶¹⁸ *See, e.g.*, Airtouch reply in CC Docket No. 95-185 at 10-13.

²⁶¹⁹ *See, e.g.*, Airtouch comments in CC Docket No. 95-185 at 59.

abuses, it is argued, present a formidable barrier to entry in the CMRS marketplace.²⁶²⁰ Most paging carriers allege that incumbent LECs charge narrowband CMRS providers for terminating LEC-originated calls on the paging network but do not compensate narrowband CMRS providers for terminating incumbent LEC originated traffic.²⁶²¹ Many narrowband CMRS providers also allege discrimination because the charges assessed to paging companies for connection to the landline network are different from the charges assessed on other CMRS providers, and that many of these interconnection charges are not substantiated with adequate cost data.²⁶²²

c. Discussion

(1) Symmetry In General

1085. Regardless of whether the incumbent LEC's transport and termination prices are set using a TELRIC-based economic cost study or a default proxy, we conclude that it is reasonable to adopt the incumbent LEC's transport and termination prices as a presumptive proxy for other telecommunications carriers' additional costs of transport and termination. Both the incumbent LEC and the interconnecting carriers usually will be providing service in the same geographic area, so the forward-looking economic costs should be similar in most cases. We also conclude that using the incumbent LEC's forward-looking costs for transport and termination of traffic as a proxy for the costs incurred by interconnecting carriers satisfies the requirement of section 252(d)(2) that costs be determined "on the basis of a reasonable approximation of the additional costs of terminating such calls." Using the incumbent LEC's cost studies as proxies for reciprocal compensation is consistent with section 252(d)(2)(B)(ii), which prohibits "establishing with particularity the additional costs of transporting or terminating calls."²⁶²³ If both parties are incumbent LECs (e.g., an independent LEC and an adjacent BOC), we conclude that the larger LEC's forward-looking costs should be used to establish the symmetrical rate for transport and termination. We conclude that larger LECs are generally in a better position to conduct a forward-looking economic cost study than smaller carriers.

1086. We conclude that imposing symmetrical rates based on the incumbent LEC's additional forward-looking costs will not substantially reduce carriers' incentives to minimize those costs. A symmetric compensation rule gives the competing carriers correct incentives to

²⁶²⁰ See Celpage comment in CC Docket No. 95-185 at 6.

²⁶²¹ See e.g., Arch comments in CC Docket No. 95-185 at 6; Celpage comments in CC Docket No. 95-185 at 6.

²⁶²² See, e.g., Arch comments in CC Docket No. 95-185 at 23-25.

²⁶²³ 47 U.S.C. §252(d)(2)(B)(ii).

minimize its own costs of termination because its termination revenues do not vary directly with changes in its own costs. Moreover, symmetrical rates based on the incumbent LEC's costs should not seriously affect incumbent LECs' incentives to control costs. We expect that incumbent LECs will transport and terminate much more traffic that originates on their own networks than traffic that originates on competing carriers' networks. Even if, under the additional cost standard, incumbent LECs were required to reflect any improvements in operating efficiency, and consequent cost reductions, in reduced termination rates, the cost savings realized by the incumbent LEC are likely to be much greater than its reduction in net termination revenues, because the majority of traffic transported and terminated is likely to be its own. Even if a pass-through of incumbent LEC's cost reductions were instantaneous and complete, the number of minutes of use on which an incumbent LEC's net termination revenues is assessed is much smaller than its overall number of minutes of switching and transport. Moreover, if a portion of the reduction in costs is specific to exchange traffic, under symmetrical rates, the LEC's revenues from terminating traffic originating from another local carrier are based on the net difference in traffic, which is likely to be much smaller than the total traffic it terminates.²⁶²⁴ For example, in the case where traffic is balanced, net termination charges are zero, a figure that is unaffected by changes in the incumbent LEC's costs, and the incumbent LEC is provided with correct incentives to minimize termination costs.

1087. We also find that symmetrical rates may reduce an incumbent LEC's ability to use its bargaining strength to negotiate excessively high termination charges that competitors would pay the incumbent LEC and excessively low termination rates that the incumbent LEC would pay interconnecting carriers. As discussed by commenters in the *LEC-CMRS Interconnection* proceeding, LECs have used their unequal bargaining position to impose asymmetrical rates for CMRS providers and, in some instances, have charged CMRS providers origination as well as termination charges.²⁶²⁵ On the other hand, symmetrical rates largely eliminate such advantages because they require incumbent LECs, as well as competing carriers, to pay the same rate for reciprocal compensation.

²⁶²⁴ Consider a situation approximating traditional LEC-CMRS interconnection, in which traffic flows are substantially unbalanced: let us suppose, of 1,000,000 minutes of use, 750,000 are CMRS-to-LEC and 250,000 LEC-to-CMRS. Thus, under symmetric compensation at 0.3 cents per minute, the LEC receives 0.3 cents times 500,000, or \$1,500.00. If it reduced its per-minute cost, for some reason only on terminating CMRS-to-LEC traffic, to 0.2 cents per minute, it would save 0.1 cent times 750,000, or \$750.00, in reduced costs, whereas its terminating revenues would fall by only 0.1 cent times 500,000, or \$500.00. Thus, it would still have substantial incentive to make the cost reduction in question. In situations closer to traffic balance, the incentive is even more favorable. And, of course, the LEC probably also reduces its cost of switching on many millions of other minutes that do not involve other networks at the same time.

²⁶²⁵ See, e.g., Century Comments in CC Docket No. 95-184 at 4; Western Wireless Comments in CC Docket No. 95-185 at 14.